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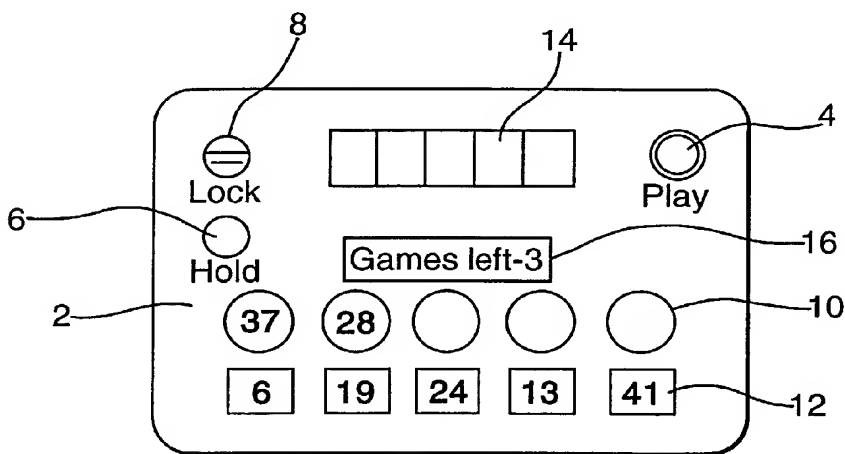
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*[Continued on next page]*

**(54) Title:** A GAME DEVICE



**(S7) Abstract:** A card-like game device (2) includes a play push-button (4), a hold push-button (6) and a lock push-button (8). Five display windows (10) and five corresponding display windows (12) are spaced along the device in two parallel straight lines. The device is powered by batteries or solar cells (14) and the window (16) displays relevant information. To play the game the player chooses five numbers which are displayed in the windows (12). The lock button (8) is pressed to unlock the device, and the play button (4) is then pressed to start the game. Numbers move across the display windows (10) until numbers come to rest in sequence in all the windows (10). If a number in a display window (10) matches a number in the corresponding window (12) this is classed as a win. Any winning number in the windows (10) can be held and rolled over into the next game by pressing the hold button (6). Alternatively the lock button (8) can be pressed to retain any winning number in the windows (10) and to prevent any further games being played.



TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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A GAME DEVICE

The present invention relates to a device for playing a game in which the purpose of the game is to obtain one or more winning characters. In this specification the term "characters" includes numbers, letters, illustrations or symbols.

In one device of the invention a "winning" character is a character corresponding to a character which has been pre-selected by an organiser of the game.

In another device of the invention a "winning" character is a character corresponding to a character pre-selected by the player.

According to one aspect of the present invention there is provided a device for playing a game, the said device comprising a first window group for displaying characters selected by the player and recorded by a game machine, a second window group corresponding to the first window group, a lock control operable to allow or prevent a game being played, and a play control operable to start the game causing characters to come to rest in the windows of the second group.

In a preferred embodiment of the invention the characters are caused to come to rest in sequence in the windows of said second window group.

The device may include a hold control to retain those characters in the said second window group which correspond with characters in said first window group.

Said first and second window groups may each comprise a plurality of windows spaced along the device with each window of one group corresponding to an associated window of the other group.

According to another aspect of the present invention there is provided a device for playing a game, said device comprising a window group for displaying characters, a lock control operable to allow or prevent a game being played, and a play control operable to start the game causing characters to come to rest in the windows of said window group.

The characters may be caused to come to rest in sequence in the windows of said window group.

The device may include a hold control to retain selected characters in said window group. Preferably the windows of said group are spaced along the device in a straight line.

The above-mentioned devices may be intended to be hand held, and may be in card form and powered by batteries or solar cells located in the device together with appropriate software. The play control may be a button or at least one sound or light activated switch, and the device may be made ready for play by a suitable security tool.

Two embodiments of the invention will now be described by way of example with reference to the accompanying drawings in which:-

Figure 1 is a front elevation of one hand-held device of the invention,

Figure 2 is a side elevation of the device of Figure 1,

Figure 3 is a rear elevation of the device of Figures 1 and 2,

Figure 4 is a front elevation of another hand-held device of the invention,

Figure 5 is a side elevation of the device of Figure 4, and

Figure 6 is a rear elevation of the device of Figures 4 and 5.

Referring to Figures 1 to 3, a rectangular card-like game device 2 is formed in two halves which are fused together to have the approximate thickness of a credit card as shown in Figure 2. The device includes a play-push button 4, a hold push-button 6, and a lock push-button 8 which is recessed to reduce the risk of it being pushed accidentally.

Five display windows 10 and five corresponding display windows 12 are spaced along the length of the device in two parallel straight lines. At the start of the game all of the display windows are blank, and the device is powered by batteries or solar cells 14 housed in the device 2 together with appropriate software. A window 16 displays relevant information such as "number of games yet to play", "win", "credit", "locked", "game", "game over" and hold".

Referring to Figure 3, rules 18 of the game to be played are written on the rear face of the device 2.

In order to play the game the player chooses five numbers between 0 and 99 which may be selected by a keyboard of a game dispenser vending machine. Alternatively the numbers may be

ticked off by a player on a pre-printed ticket which is then inserted into the game dispenser vending machine (not shown).

Whichever method is used to choose the selected numbers by the player, these numbers are electronically recorded by the dispensing machine along with any other required information. The machine then prints the chosen numbers so that they are displayed in the display windows 12. The game device is then dispensed from the vending machine, and this step may be carried out by an official of the establishment owning the vending machine. For example the game may be paid for by putting money in the vending machine or giving money to an official who will operate the machine for the game player. The information for carrying out this step may be printed on the back of the device 2 as shown in Figure 3 along with rules and conditions of playing the game.

The device is unlocked by pressing the lock button 8, and the play button 4 is then pressed to re-start the game. This causes all the display windows 10 to go blank. Numbers then move across the first window of the display windows 10 until a number comes to rest in the first window. After a small delay numbers move across the second window of the display windows 10 until a number comes to rest in that second window. This process is repeated until all the windows 10 display a number. If any of the numbers in the display windows 10 match a number in the corresponding window of the display windows 12 this will be classed as a win. The extent of the win can depend on the location of the matching numbers in the windows 10 and 12 and on the number of matching numbers in the windows 10 and 12.

If only some of the numbers in the windows 10 and 12 are matching then provision is made to hold these numbers in the

display windows 10 by pressing the hold button 6 and rolling over these numbers into the next game to be played. If however the player wishes to accept the prize for the win obtained in the last game this can be done by pressing the lock button 8 which means that no further games can be accidentally played to erase the winning number or numbers. The device 2 can then be sent back to the game organisers for verification and payment of a prize.

Referring to Figures 4 to 6 another rectangular card-like game device 20 is formed in two halves which are fused together to have the approximate thickness of a credit card as shown in Figure 5. The device includes a play push-button 22, a hold push button 24, and a lock push-button 26 which is recessed to avoid the risk of it being pushed accidentally.

Three display windows 28 are spaced along the width of the central part of the device 20 in a straight line, and at the start of the game all of the display windows are blank. The device is powered by batteries or solar cells 29 in the device 20 together with appropriate software. A window 30 displays relevant information such as "number of games yet to play", "win", "credit", "locked", "game", "game over" and "hold".

Referring to Figure 6, the rules 32 of the game to be played are written on the rear face of the device 20.

In operation, thousands of these card devices 20 are distributed, and a few of these cards are programmed to produce winning numbers in one or more of the windows 28. The first prize will be awarded to a card displaying winning numbers in all three windows 28, a second prize for a card displaying winning numbers in two of the windows 28, and a third prize is

awarded to a card displaying a winning number in one of the windows 28. If preferred, the second and third prizes may be awarded only to cards that produce winning numbers in selected ones or one of the windows 28.

In order to play the game, the device 20 is unlocked by pressing the lock button 26, and the play button 22 is then pressed to start the game. This causes all the display windows 28 to go blank. The numbers then start moving across the first of the display windows 28 until a number comes to rest in that first window. After a small delay, numbers start moving across the second window of the display windows 28 until a number comes to rest in the second window. The process is continued until a third window 28 displays a number. If any of the numbers in the displays windows 28 correspond to the pre-selected winning numbers then this will be classed as a win. As previously mentioned, the extent of the win can depend upon the number and location of the winning numbers in the windows 28. If only one or two of the windows 28 display winning numbers then a decision is made by the player whether or not to hold these numbers in those display windows 28 by pressing the hold button 24 and rolling over these numbers into the next game to be played. If however the player wishes to accept the prize for the numbers obtained in the last game, this can be done by pressing the lock button 26 which means that no further games can accidentally be played to erase the winning numbers or number. The device 20 can then be sent back to the game organisers for verification and payment of a prize.

The software of the game devices is specifically designed to drive the basic functions of the game control. Other levels of the software are particularly designed to enable a specific game



to be played within the game device. This can vary according to the design of the game itself.

Various electronic components are also specifically designed to work within the thin card of the game devices.

The described invention and its variations can also be displayed and played as a video game with the same or similar graphics on a video screen or television set as a stand alone coin operated amusement machine.

The following design features apply to both the two above-mentioned hand-held devices of the invention.

The size or area of the screens 10, 12 and 28 is considerably smaller than that of previous game devices in order to accommodate the type of games to be played on these devices. The shape and size of these windows are selected in accordance with the way the characters move within the windows to make the games attractive to the players.

The device illustrated in Figures 4 to 6 has three small rectangular or oval windows 28, and the device illustrated in Figures 1 to 3 has circular windows 10 and rectangular windows 12.

The game devices 2 and 20 are manufactured using thin film technology in order to reduce the thickness of the various components, in particular the microchip components which govern the working features of the game. This technology enables the overall thickness of the devices to be approximately 2 millimetres as compared with 6 millimetres in previously known

game devices. Because these devices are thin they can be described as a gamecard or ticket which assists their sales, and renders them suitable for promotions and lotteries.

The devices 2 and 20 include lock buttons 8 and 26 which can be pressed to ensure that no further games can accidentally be played to erase the winning numbers or number. As an alternative to the above-described manual lock feature system these game devices 2 and 20 can have an automatic lock feature activation built in to their programme. This automatic lock feature activation ensures that a winning number obtained while playing the game is automatically locked into the window display thereby preventing the player from losing a winning number obtained while playing the game. The operator can chose whether to use the manual or the automatic locking system.

Although the card-like game devices 2 and 20 can be powered by a standard watch battery there is obviously a severe limit on the size of the watch battery in order to retain the card-like appearance of the devices.

An alternative battery system which may be used consists of electrolytic negative and positive pastes which are installed into the thickness of the card of the game devices 2 and 20. This installation is carried out during the manufacture of the game device by cutting two holes through the thickness of the card-like device and installing the electrolytic paste into the device. This paste is then held in place by a plastic foil located on both sides of the device, and contact points protrude from the paste to make electrical contact with the software of the game device.

When all the windows 10 and 28 of the game devices 2 and 20 present winning numbers, the device software presents a security code which will automatically display itself in these windows either alternatively to or in addition to the winning numbers. This security code consists of a different type of graphic to the numbers. If the game card is tampered with this security code is not displayed, thereby warning the game organisers not to pay out a prize.

A range of ink jet or holographic markings can also be encrypted onto the exterior surface of the card device as an additional precaution to control the use of the device from manufacture through to return to the game organisers for verification and payment of a prize.

Provision can be built into the software to provide a display of the starting date of a game when a player activates the card device. This display can be shown in the corners of one or more of the windows 10 and 28, or on a separate strip on the card device. This display can be operated automatically by a pull-tag on the device battery to assure the player that the card device has not been tampered with.

CLAIMS

1. A device (2) for playing a game, said device comprising a first window group (12) for displaying characters selected by the player and recorded by a game machine, a second window group (10) corresponding to the first window group, a lock control (8) operable to allow or prevent a game being played, and a play control (4) operable to start the game causing characters to come to rest in the windows of said second window group.
2. A device as claimed in claim 1 in which the characters are caused to come to rest in sequence in the windows of said second window group.
3. A device as claimed in claim 1 or claim 2 including a hold control (6) to retain those characters in said second window group which correspond to characters in said first window group.
4. A device as claimed in any preceding claim in which said first and second window groups may each comprise a plurality of windows spaced along the device with each window of one group corresponding to an associated window of the other group.
5. A device (20) for playing a game, said device comprising a window group (28) for displaying characters, a lock control (26) operable to allow or prevent a game being played, and a play control (22) operable to start the game causing characters to come to rest in the windows of said window group.
6. A device as claimed in claim 5 in which the characters are caused to come to rest in sequence in the windows of said window group.

7. A device as claimed in claim 5 or claim 6 including a hold control (24) to retain selected characters in said window group.

8. A device as claimed in any preceding claim in which the windows of at least one of said groups are spaced along a straight line.

9. A device as claimed in any preceding claim which is powered by batteries (14) (29).

10. A device as claimed in any one of claims 1 to 8 which is powered by one or more solar cells (14) (29).

11. A device as claimed in any preceding claim including an information window (16) (30).

12. A device as claimed in any preceding claim including a security tool to render the device ready for play.

13. a device as claimed in any preceding claim which is in card form.

14. A device as claimed in any preceding claim in which the play control is a button.

15. A device as claimed in any one of claims 1 to 13 in which the play control is at least one switch.

16. A device as claimed in claim 15 in which the switch is sound or light activated.

17. A device as claimed in any preceding claim in which at least some of the characters are numbers.

18. A device as claimed in any preceding claim manufactured by thin film technology.

19. A device as claimed in any preceding claim in which the said lock control is automatically operable to prevent a game being played.

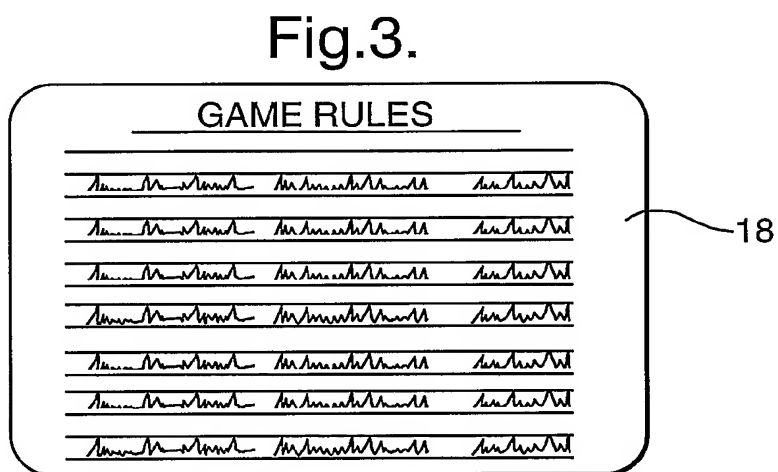
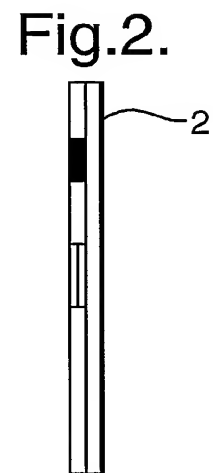
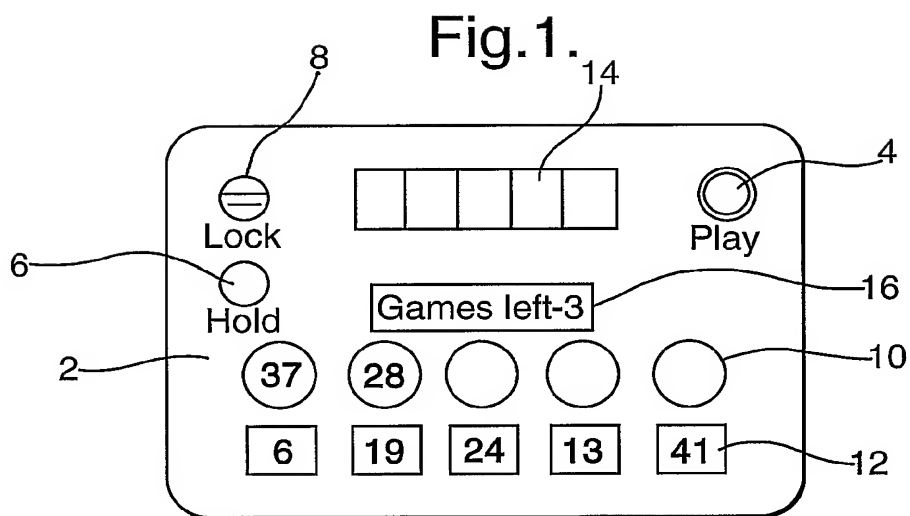
20. A device as claimed in any one of claims 1 to 8 which is powered by electrolytic positive and negative pastes.

21. A device as claimed in any preceding claim including means to display a security code when winning characters are displayed.

22. A device as claimed in any preceding claim including means to display the starting date of a game.

23. A device for playing a game substantially as herein described and shown in the accompanying drawings.

1/2



2/2

Fig.4.

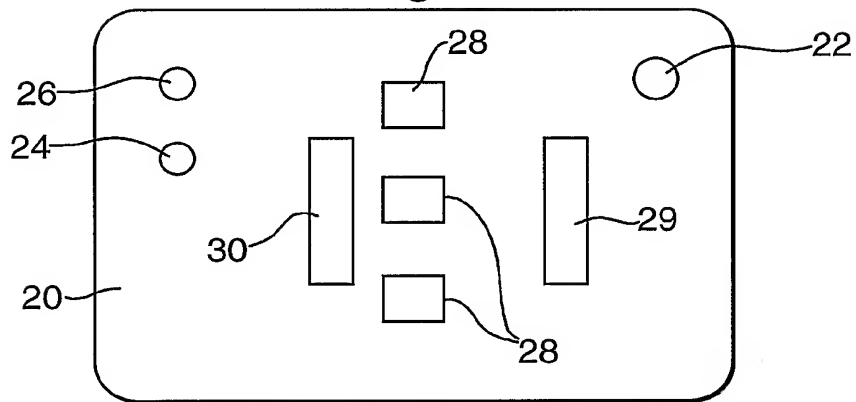


Fig.5.

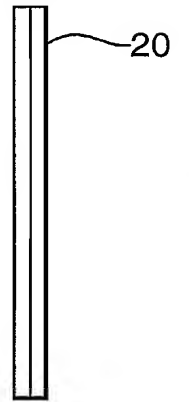
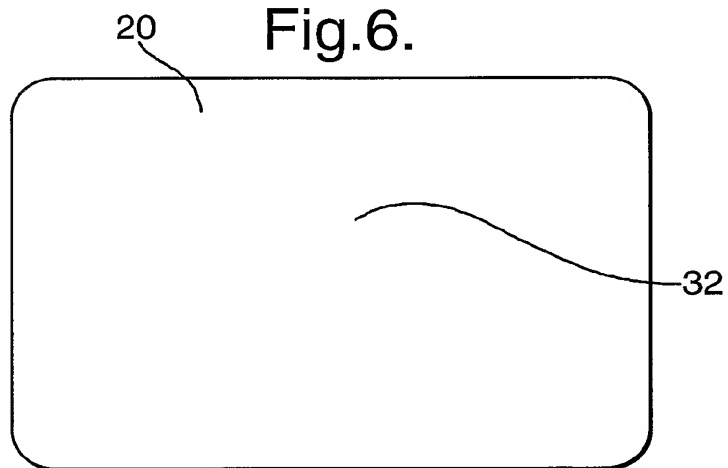


Fig.6.





## INTERNATIONAL SEARCH REPORT

PCT/GB 02/03053

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 A63F 3/06 G07C 15/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A63F G07C G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CA 2 079 240 A (SENECAL ) 29 March 1994 (1994-03-29) figures 1, 3A, 3B	1
A	GB 2 338 319 A (AYNSLEY) 15 December 1999 (1999-12-15) the whole document	1
A	DE 200 11 143 U (WIESE ET AL.) 21 December 2000 (2000-12-21) the whole document	1
A	DE 299 22 111 U (BROCKHAGE ) 20 April 2000 (2000-04-20) the whole document	1
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

PCT/GB 02/03053

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 858 122 A (KREISNER ) 15 August 1989 (1989-08-15) the whole document -----	1

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Information on patent family members

PCT/GB 02/03053

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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